

## Addieren und Subtrahieren von Brüchen – Lösungen

### • Aufgabe 1:

a)  $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$     b)  $\frac{3}{6} + \frac{1}{6} = \frac{4}{6}$     c)  $\frac{6}{16} + \frac{4}{16} = \frac{10}{16}$     d)  $\frac{6}{13} + \frac{5}{13} = \frac{11}{13}$

### • Aufgabe 2:

a)  $\frac{2}{4} + \frac{5}{4} = \frac{7}{4}$     b)  $\frac{12}{15} + \frac{8}{15} = \frac{4}{3}$     c)  $\frac{18}{12} - \frac{3}{12} = \frac{5}{4}$     d)  $\frac{8}{9} - \frac{5}{9} = \frac{1}{3}$

### • Aufgabe 3:

a)  $\frac{1}{6} + \frac{12}{6} + \frac{8}{6} = \frac{7}{2}$     b)  $\frac{32}{18} - \frac{12}{18} - \frac{8}{18} = \frac{2}{3}$     c)  $\frac{22}{10} - \frac{3}{10} + \frac{5}{10} - \frac{16}{10} = \frac{4}{5}$

### • Aufgabe 4:

a)  $\frac{1}{6}, \frac{5}{12}, \frac{3}{18}$     Hauptnenner = kgV(6, 12, 18) = 36  
 b)  $\frac{7}{15}, \frac{4}{20}$     Hauptnenner = kgV(15, 20) = 60  
 c)  $\frac{32}{24}, \frac{21}{48}, \frac{5}{32}$     Hauptnenner = kgV(24, 48, 32) = 96  
 d)  $\frac{3}{16}, \frac{5}{2}, \frac{12}{8}$     Hauptnenner = kgV(16, 2, 8) = 16  
 e)  $\frac{2}{6}, \frac{4}{11}, \frac{9}{3}, \frac{11}{22}$     Hauptnenner = kgV(6, 11, 3, 22) = 66

### • Aufgabe 5:

a)  $\frac{1}{6} + \frac{5}{12} = \frac{7}{12}$     b)  $\frac{3}{16} + \frac{7}{24} = \frac{23}{48}$     c)  $\frac{7}{11} - \frac{6}{13} = \frac{25}{143}$     d)  $\frac{13}{48} - \frac{5}{32} = \frac{11}{96}$

### • Aufgabe 6:

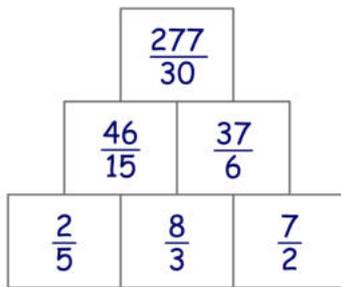
a)  $\frac{3}{16} + \frac{1}{2} - \frac{5}{8} = \frac{1}{16}$     b)  $\frac{12}{15} - \frac{3}{20} + \frac{8}{30} = \frac{11}{12}$     c)  $\frac{5}{7} + \frac{7}{10} - \frac{3}{14} + \frac{12}{35} = \frac{54}{35}$

### • Aufgabe 7:

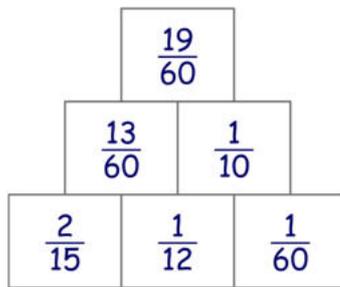
a)  $\frac{11}{24} + \frac{5}{16} = \frac{37}{48}$     b)  $\frac{7}{12} + \frac{4}{3} = \frac{23}{12}$     c)  $\frac{2}{3} - \frac{7}{21} = \frac{2}{6}$     d)  $\frac{11}{9} - \frac{5}{12} = \frac{29}{36}$   
 e)  $\frac{5}{7} - \frac{7}{21} - \frac{21}{63} = \frac{1}{21}$     f)  $\frac{6}{8} + \frac{3}{7} - \frac{3}{28} = \frac{15}{14}$     g)  $\frac{1}{15} + \frac{2}{30} + \frac{3}{60} = \frac{1}{10}$

• Aufgabe 8:

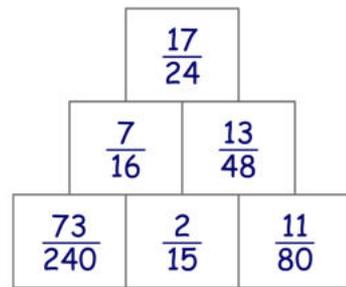
a)



b)



c)



• Aufgabe 9:

Rad: 10

Bus: 12

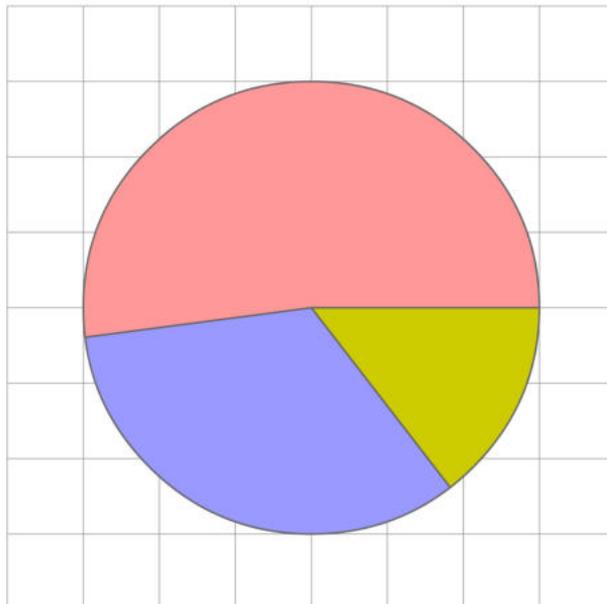
Eltern: 8

• Aufgabe 10:

Anteil sonstiger Flächen an der Gesamtfläche:  $\frac{11}{75}$

Flächen in km<sup>2</sup> (Runde auf Tausender):

Landwirtschaft: 186 000 km<sup>2</sup>    Wald: 119 000 km<sup>2</sup>    Sonstige: 52 000 km<sup>2</sup>



Legende:

- Landwirtschaft
- Wald
- Sonstige